

such remarks, undersigned has noted a typographical error in the fourth line from the bottom of page 6, wherein the penultimate word should be "teach" rather than "each".

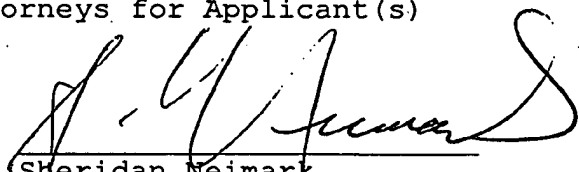
Applicants wish to briefly re-emphasize that the prior art does not teach the use of diamond as called for in claim 2 and the claims dependent thereon, and claim 13 and the claims dependent thereon. Moreover, even with respect to claim 1, applicants do not see that the prior art shows a solid state substrate for amplifying immobilized DNA, which substrate is thermally conductive. Most of the references do not even show a substrate formed of a solid state material, let alone a solid state material which has good thermal conductivity.

Applicants again request favorable consideration.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant(s)

By


Sheridan Neimark
Registration No. 20,520

SN:jaa

Telephone No.: (202) 628-5197

Facsimile No.: (202) 737-3528

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Version with Markings to Show Changes Made

1. (Amended) Solid state substrate for DNA immobilizing, said solid state substrate having substantial
~~with excellent thermal conductive characteristic~~ conductivity
for amplifying immobilizing DNA.

3. (Amended) Substrate as claimed in claim 12,
wherein said substrate is chemically modified.

4. (Amended) Substrate as claimed in claim 13,
wherein said substrate has a polar ~~group~~ radical at terminal.

5. (Amended) Substrate as claimed in claim 4,
wherein said polar radical is hydroxyl radical, carboxyl
~~group~~ radical, epoxy radical or amino radical.

12. (Amended) ~~A method~~ Method for amplifying DNA
for a substrate or chip ~~as claimed in claims 1 through 10 and~~
~~chip as claimed in claim 11,~~ comprising the following steps:

(a) chemically modifying the substrate or chip to
provide a polar radical on the surface of the substrate or
chip;

(b) cleaning the chemically modified substrate or
chip with TE buffer solution;

(c) dipping the chemically modified and cleaned
substrate or chip in a solution containing a primer with

respect to amplifying target DNA, four kinds of nucleotide and DNA polymerize;

(d) holding the temperature of said solution at 95°C for about 1.5 minutes;

(e) holding the temperature of said solution at 45°C for about a minute;

(f) holding the temperature of said solution at 74°C for about 2 minutes; and

(g) repeating the steps (d)-(f).

13. (Amended) A solid state substrate having DNA immobilized thereon~~Substrate as claimed in claim 2~~, wherein said substrate is diamond and is chemically modified.

14. (Amended) Substrate having DNA immobilized thereon as claimed in claim 13, wherein said substrate has a polar ~~group~~radical at terminal.

15. (Amended) Substrate having DNA immobilized thereon as claimed in claim 14, wherein said polar radical is hydroxyl radical, carboxyl ~~group~~radical, epoxy radical or amino radical.